

120 LONG RIDGE RD., STAMFORD, CONN. 06904

November 8, 1985

REGISTERED MAIL
RETURN RECEIPT REQUESTED

U.S. Environmental Protection Agency Heather M. Ford, Chief Enforcement and Cost Recovery Section JFK Federal Building HWC 1907 (25) Boston, MA 02203

Dear Ms. Ford:

Consistent with your agency's CERCLA 104 and RCRA 3007 request dated August 31, 1985 seeking information relative to Olin's Pine Swamp site, the following response has been prepared for your review.

 $\overline{\text{NOTE}}$ : Although the original request required a 30-day response,  $\overline{\text{Olin}}$  requested and subsequently received an additional 60-days in which to complete the required collection and evaluation of relevant documents. A copy of our request is attached to this correspondence.

Olin has been unable, after a diligent search, to locate specific disposal records that would have been used to characterize (both in terms of quantity and composition) waste materials disposed of at Pine Swamp. All such activities occurred before March 1966. In an effort to determine what materials might have been sent to the site, we conducted interviews with several employees involved with the handling and use of chemicals at our New Haven research facilities and the Winchester operations seeking to determine those materials that were handled in the greatest volume, and therefore, had the highest probability of being sent to Pine Swamp for disposal. Listed below is the list of chemicals that resulted from this investigation. Please note that we have found no records supporting the belief that any of these compounds actually were disposed at Pine Swamp.

Halogenated Organics (low b.p.)
m-Aminobenzeotrifluoride
Iron
Ammonium chloride
Dimethylsulfoxide
Sulfolane (tetramethylenesulfone)
Vinylene carbonate
Ethylene carbonate

Zirconium
Dichloroethyl ether
Dichloroethylene
Ethylenediamine
Chloroethers
Ethanolamine
2-Chloroethanol
Hexachlorobenzene

3987d

Explosives

Pyridine aldehyde t-Butylhydroquinone

Omadines

Dexi1

Dimethylether Diethylene glycol

Benzene Xylene Ethanol

Petroleum ether

Hexane

Thermal phosphate rock

Dichlorobenzene

Palladium

Phenyl pyrazolone Hydrazine derivatives (nitro heterocycles)

Phosphines

Methylene chloride

Chloroform Triethylamine Cyclic amines

1-Aziridinyl phosphonitriles

Phosphoric acid amides N-ethylene carboxamides N-ethylene sulfonamides

Phosphorous derivatives (Squibb)

2,2-Bis(p-chloropheny1)
-1,1-dichloroethane
2,2-Bis(p-chloropheny1)
-1,1-trichloroethane

Terrazole
Ethyl nitrate
Propyl nitrate
Bore cleaners
Gun oils

Stock finishers

Acetone Nickel Silver

Phosphor bronze

Titanium

Mercury

Fulminate of mercury

Lead styphnate
Allylglycidolether
Laurylguanidine
Itaconic acid
Methylethyl ketone
Plastic shot shells
Propellent modifiers

Hydrazine nitrate Sulfuric acid

Acetic acid New primers Alkali cleaners

(trisodium phosphate)

Cutting fluids Trichloroethylene

Urethanes Surfactants

Polymethylmethacrylate

Terephthalic Acid
Toluenediamine
Toluenediisocyanate
Dinitrotoluene

Arochlors

T-butylalochol

RF-230

Polyols

p-Fluoronitrobenzene

p-Fluoroaniline

Trichlorobutyleneoxide Tetrachlorobutylalcohol

Phosphoric Acid

Super dense soda ash

Toluene
Ethylether
Aluminum Hydride
Lithium borohydride
Lithium aluminumhydride
Chloropyridines
Carbontetrachloride

Decaborane Pentaborane

Fluorinated Aromatics

t-Butylhydroperoxide

The great majority of items on this list would be detected through the utilization of EPA's priority pollutant analytical protocol (EPA-600/4-82-057 July 1982) or the Agency's SW 846 analytical protocol for the list of Appendix VIII hazardous constituents.

However, for those chemicals that wouldn't be identified by these procedures, Olin has selected the following group of 10 compounds that we believe would serve as appropriate surrogates.

Toluene diamine

Hydrazine

Trichlorobutylalocho1

2,2,2 trichloro 2',4' dinitroacetanilide

Trichloroethylene

Pentachloronitrobenzene

2 Chloropyridine DiethyleneglycolomonoLithium Boron

ethylether

Olin is committed to conducting a new round of ground and surface water analysis using methodology specifically developed to determine concentration levels of the above surrogate compounds consistent with a format currently being negotiated between our corporation and the Connecticut Department of Environmental Protection. We will also subject at least two samples to the SW-846 analytical protocol. Once this information is available, it will be forwarded to the agency. Additional information supporting the above including the results of three separate studies conducted on Olin's property and another investigation conducted on an adjacent parcel previously owned by Olin is provided below:

o Report entitled "Environmental Investigation of Pine Swamp, Hamden, CT" (Attachment A) prepared by Environmental Research and Technology (ERT) that was issued in January 1981.

NOTE: The analysis conducted for the first round of priority pollutant VOA analysis on June 10, 1980 by ERT's contract laboratory Spectrix (7408 Fannin, Houston, Texas), was, in our judgment after extensive review, invalid because of non-adherence to the EPA's sampling protocol. Correspondence from ERT (also appended to Attachment B) is included with this submission to support this judgment.

Report entitled "Phase II Site Investigation at Pine Swamp, Hamden, CT" (Attachment C), prepared by Environmental Research and Technology (ERT) that was issued in June 1982.

NOTE: Upon review of this report, it was determined that a typographical error occurred when Table 4-11 was prepared for publication by ERT. Three analyses were reported in ppm when the heading specified ppb. The appropriate adjustment has been made on page 4-34 of the copy included in this submission.

- o Report entitled "Hydrogeology Study Anixter Communications, Hamden, CT., March 1983" (Attachment D) prepared by Fuss and O'Neill for Anixter Corporation.
- Report entitled "Pine Swamp Site Program, Hamden, CT" (Attachment E) prepared by Malcolm Pirnie (MP) that was issued in August 1983. Also included is a copy of the transmittal letter from Olin to the Connecticut DEP.

- o Report entitled "Final Site Inspection Olin Corporate Site, Hamden, CT" (Attachment F) prepared by NUS Corporation that was issued January 5, 1985.
- Olin memorandum issued June 3, 1983 entitled "Pine Swamp Samples for Lead" (Attachment G) relating the results of a May 19, 1983 sampling of 3 groundwater monitoring wells for lead. Also included is an earlier Olin memorandum noting the difference between ERT's results and the State's information (Duff to Knowles 8/17/85).
- O Copies of correspondence from the Hamden Department of Health (Attachment H) relative to their 1966 investigation and subsequent closure of all disposal activities at Olin's Pine Swamp property in March 1966.
- o Collection of newspaper articles describing various activities at Pine Swamp (Attachment I).
- o CERCLA 103(c) response submitted to the USEPA June 1981 (Attachment J).
- o Eckhardt survey response submitted to Congressman Robert Eckhardt (Chairman Subcommittee in Oversight and Investigation) October 1979 (Attachment K).

We trust this will satisfy your requirements, however, if you have any questions, please don't hesitate to call me at Olin's Stamford, Connecticut headquarters office (203-356-3476).

Very truly yours,

P. B. Duff

Manager, Environmental and Energy Affairs

PBD:mdc Attachments